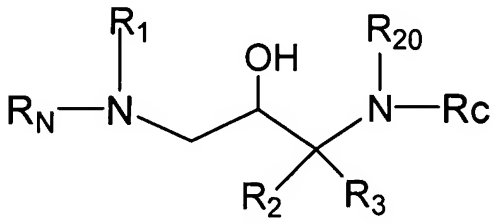
Listing of Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Claim 1. (original) A compound of the formula I:



or a pharmaceutically acceptable salt or ester thereof, wherein R_{20} is H, C_{1-6} alkyl or alkenyl, C_{1-6} haloalkyl or C_{4-7} cycloalkyl; R_1 is $-(CH_2)_{1-2}-S(O)_{0-2}-(C_1-C_6$ alkyl), or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, =O, -SH, $-C\equiv N$, $-CF_3$, $-C_1-C_3$ alkoxy, amino, mono- or dialkylamino, $-N(R)C(O)R'-$, $-OC(=O)-$amino and $-OC(=O)-$mono- or dialkylamino, or

C_2-C_6 alkenyl or C_2-C_6 alkynyl, each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, $-C\equiv N$, $-CF_3$, C_1-C_3 alkoxy, amino, and mono- or dialkylamino, or

aryl, heteroaryl, heterocyclyl, $-C_1-C_6$ alkyl-aryl, $-C_1-C_6$ alkyl-heteroaryl, or $-C_1-C_6$ alkyl-heterocyclyl, where the ring portions of each are optionally substituted with 1, 2, 3, or 4 groups independently selected from halogen, -OH, -SH, $-C\equiv N$, $-NR_{105}R'_{105}$, $-CO_2R$, $-N(R)COR'$, or $-N(R)SO_2R'$, $-C(=O)-(C_1-C_4)$ alkyl, $-SO_2-$amino, $-SO_2-$mono or dialkylamino, $-C(=O)-$amino, $-C(=O)-$mono or dialkylamino, $-SO_2-(C_1-C_4)$ alkyl, or

C_1-C_6 alkoxy optionally substituted with 1, 2, or 3 groups which are independently selected from halogen, or

C_3-C_7 cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, amino, $-C_1$-C_6 alkyl and mono- or dialkylamino, or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, $-CF_3$, $-C_1$-C_3 alkoxy, amino, mono- or dialkylamino and $-C_1$-C_3 alkyl, or

C_2-C_{10} alkenyl or C_2-C_{10} alkynyl each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, amino, C_1-C_6 alkyl and mono- or dialkylamino; and the heterocyclyl group is optionally further substituted with oxo;

R and R' independently are hydrogen, C_1-C_{10} alkyl, C_1-C_{10} alkylaryl or C_1-C_{10} alkylheteroaryl;

R_C is hydrogen, $-(CR_{245}R_{250})_{0-4}$-aryl, $-(CR_{245}R_{250})_{0-4}$-heteroaryl, $-(CR_{245}R_{250})_{0-4}$-heterocyclyl, $-(CR_{245}R_{250})_{0-4}$-aryl-heteroaryl, $-(CR_{245}R_{250})_{0-4}$-aryl-heterocyclyl, $-(CR_{245}R_{250})_{0-4}$-aryl-aryl, $-(CR_{245}R_{250})_{0-4}$-heteroaryl-aryl, $-(CR_{245}R_{250})_{0-4}$-heteroaryl-heterocyclyl, $-(CR_{245}R_{250})_{0-4}$-heteroaryl-heteroaryl, $-(CR_{245}R_{250})_{0-4}$-heterocyclyl-heteroaryl, $-(CR_{245}R_{250})_{0-4}$-heterocyclyl-heterocyclyl, $-(CR_{245}R_{250})_{0-4}$-heterocyclyl-aryl, $-[C(R_{255})(R_{260})]_{1-3}$-CO-N-$(R_{255})_2$, $-CH(aryl)_2$, $-CH(heteroaryl)_2$, $-CH(heterocyclyl)_2$, -CH(aryl)(heteroaryl), $-(CH_2)_{0-1}$-$CH((CH_2)_{0-6}$-OH)-$(CH_2)_{0-1}$-aryl, $-(CH_2)_{0-1}$-$CH((CH_2)_{0-6}$-OH-$(CH_2)_{0-1}$-heteroaryl, -CH(-aryl or -heteroaryl)-CO-O(C_1-C_4 alkyl), -CH(-CH_2-OH)-CH(OH)-phenyl-NO_2, (C_1-C_6 alkyl)-O-(C_1-C_6 alkyl)-OH; $-CH_2$-NH-CH_2-CH(-O-CH_2-$CH_3)_2$, $-(CH_2)_{0-6}$-C(=NR_{235})($NR_{235}R_{240}$), or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups independently selected from the group consisting of

R_{205}, $-OC=ONR_{235}R_{240}$, $-S(=O)_{0-2}(C_1-C_6$ alkyl), -SH, $-NR_{235}C=ONR_{235}R_{240}$, $-C=ONR_{235}R_{240}$, and $-S(=O)_2NR_{235}R_{240}$, or

$-(CH_2)_{0-3}-(C_3-C_8)$ cycloalkyl wherein the cycloalkyl is optionally substituted with 1, 2, or 3 groups independently selected from the group consisting of R_{205}, $-CO_2H$, and $-CO_2-(C_1-C_4$ alkyl), or

cyclopentyl, cyclohexyl, or cycloheptyl ring fused to aryl, heteroaryl, or heterocyclyl wherein one, two or three carbons of the cyclopentyl, cyclohexyl, or cycloheptyl is optionally replaced with a heteroatom independently selected from NH, NR_{215}, O, or $S(=O)_{0-2}$, and wherein the cyclopentyl, cyclohexyl, or cycloheptyl group can be optionally substituted with one or two groups that are independently R_{205}, =O, $-CO-NR_{235}R_{240}$, or $-SO_2-(C_1-C_4$ alkyl), or

C_2-C_{10} alkenyl or C_2-C_{10} alkynyl, each of which is optionally substituted with 1, 2, or 3 R_{205} groups, wherein

each aryl and heteroaryl is optionally substituted with 1, 2, or 3 R_{200}, and wherein each heterocyclyl is optionally substituted with 1, 2, 3, or 4 R_{210};

R_{200} at each occurrence is independently selected from -OH, $-NO_2$, halogen, $-CO_2H$, C≡N, $-(CH_2)_{0-4}-CO-NR_{220}R_{225}$, $-(CH_2)_{0-4}-CO-(C_1-C_{12}$ alkyl), $-(CH_2)_{0-4}-CO-(C_2-C_{12}$ alkenyl), $-(CH_2)_{0-4}-CO-(C_2-C_{12}$ alkynyl), $-(CH_2)_{0-4}-CO-(C_3-C_7$ cycloalkyl), $-(CH_2)_{0-4}-CO-$aryl, $-(CH_2)_{0-4}-CO-$heteroaryl, $-(CH_2)_{0-4}-CO-$heterocyclyl, $-(CH_2)_{0-4}-CO-O-R_{215}$, $-(CH_2)_{0-4}-SO_2-NR_{220}R_{225}$, $-(CH_2)_{0-4}-SO-(C_1-C_8$ alkyl), $-(CH_2)_{0-4}-SO_2-(C_1-C_{12}$ alkyl), $-(CH_2)_{0-4}-SO_2-(C_3-C_7$ cycloalkyl), $-(CH_2)_{0-4}-N(H$ or $R_{215})-CO-O-R_{215}$, $-(CH_2)_{0-4}-N(H$ or $R_{215})-CO-N(R_{215})_2$, $-(CH_2)_{0-4}-N-CS-N(R_{215})_2$, $-(CH_2)_{0-4}-N(-H$ or $R_{215})-CO-R_{220}$, $-(CH_2)_{0-4}-NR_{220}R_{225}$, $-(CH_2)_{0-4}-O-CO-(C_1-C_6$ alkyl), $-(CH_2)_{0-4}-O-P(O)-(OR_{240})_2$, $-(CH_2)_{0-4}-O-CO-N(R_{215})_2$, $-(CH_2)_{0-4}-O-CS-N(R_{215})_2$, $-(CH_2)_{0-4}-O-(R_{215})$, $-(CH_2)_{0-4}-O-(R_{215})-COOH$, $-(CH_2)_{0-4}-S-(R_{215})$, $-(CH_2)_{0-4}-O-(C_1-C_6$ alkyl optionally substituted with 1, 2, 3,

or 5 -F), C_3-C_7 cycloalkyl, -$(CH_2)_{0-4}$-N(H or R_{215})-SO_2-R_{220}, -$(CH_2)_{0-4}$- C_3-C_7 cycloalkyl, or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 R_{205} groups, or

C_2-C_{10} alkenyl or C_2-C_{10} alkynyl, each of which is optionally substituted with 1 or 2 R_{205} groups, wherein

the aryl and heteroaryl groups at each occurrence are optionally substituted with 1, 2, or 3 groups that are independently R_{205}, R_{210}, or

C_1-C_6 alkyl substituted with 1, 2, or 3 groups that are independently R_{205} or R_{210}, and wherein

the heterocyclyl group at each occurrence is optionally substituted with 1, 2, or 3 groups that are independently R_{210};

R_{205} at each occurrence is independently selected from C_1-C_6 alkyl, halogen, -OH, -O-phenyl, -SH, -C≡N, -CF_3, C_1-C_6 alkoxy, NH_2, NH(C_1-C_6 alkyl) or N-(C_1-C_6 alkyl)(C_1-C_6 alkyl);

R_{210} at each occurrence is independently selected from halogen, C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, -$NR_{220}R_{225}$, OH, C≡N, -CO-(C_1-C_4 alkyl), -SO_2-$NR_{235}R_{240}$, -CO-$NR_{235}R_{240}$, -SO_2-(C_1-C_4 alkyl), =O, or

C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl or C_3-C_7 cycloalkyl, each of which is optionally substituted with 1, 2, or 3 R_{205} groups;

R_{215} at each occurrence is independently selected from C_1-C_6 alkyl, -$(CH_2)_{0-2}$-(aryl), C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_7 cycloalkyl, and -$(CH_2)_{0-2}$-(heteroaryl), -$(CH_2)_{0-2}$-(heterocyclyl), wherein

the aryl group at each occurrence is optionally substituted with 1, 2, or 3 groups that are independently R_{205} or R_{210}, and wherein

the heterocyclyl and heteroaryl groups at each occurrence are optionally substituted with 1, 2, or 3 R_{210};

R_{220} and R_{225} at each occurrence are independently selected from -H, $-C_3-C_7$ cycloalkyl, $-(C_1-C_2$ alkyl$)-(C_3-C_7$ cycloalkyl), $-(C_1-C_6$ alkyl$)-O-(C_1-C_3$ alkyl), $-C_2-C_6$ alkenyl, $-C_2-C_6$ alkynyl, $-C_1-C_6$ alkyl chain with one double bond and one triple bond, -aryl, -heteroaryl, and -heterocyclyl, or

$-C_1-C_{10}$ alkyl optionally substituted with -OH, $-NH_2$ or halogen, wherein

the aryl, heterocyclyl and heteroaryl groups at each occurrence are optionally substituted with 1, 2, or 3 R_{270} groups

R_{235} and R_{240} at each occurrence are independently H, or C_1-C_6 alkyl;

R_{245} and R_{250} at each occurrence are independently selected from -H, C_1-C_4 alkyl, C_1-C_4 alkylaryl, C_1-C_4 alkylheteroaryl, C_1-C_4 hydroxyalkyl, C_1-C_4 alkoxy, C_1-C_4 haloalkoxy, $-(CH_2)_{0-4}-C_3-C_7$ cycloalkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, and phenyl; or

R_{245} and R_{250} are taken together with the carbon to which they are attached to form a carbocycle of 3, 4, 5, 6, or 7 carbon atoms, where one carbon atom is optionally replaced by a heteroatom selected from -O-, -S-, $-SO_2-$, and $-NR_{220}-$;

R_{255} and R_{260} at each occurrence are independently selected from -H, $-(CH_2)_{1-2}-S(O)_{0-2}-(C_1-C_6$ alkyl), $-(C_1-C_4$ alkyl$)$-aryl, $-(C_1-C_4$ alkyl$)$-heteroaryl, $-(C_1-C_4$ alkyl$)$-heterocyclyl, -aryl, -heteroaryl, -heterocyclyl, $-(CH_2)_{1-4}-R_{265}-(CH_2)_{0-4}$-aryl, $-(CH_2)_{1-4}-R_{265}-(CH_2)_{0-4}$-heteroaryl, $-(CH_2)_{1-4}-R_{265}-(CH_2)_{0-4}$-heterocyclyl, or

C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl or $-(CH_2)_{0-4}-C_3-C_7$ cycloalkyl, each of which is optionally substituted with 1, 2, or 3 R_{205} groups, wherein

each aryl or phenyl is optionally substituted with 1, 2, or 3 groups that are independently R_{205}, R_{210}, or

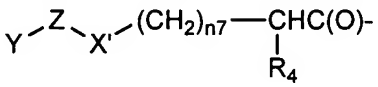
C_1-C_6 alkyl substituted with 1, 2, or 3 groups that are independently R_{205} or R_{210}, and wherein

each heterocyclyl is optionally substituted with 1, 2, 3, or 4 R_{210};

R_{265} at each occurrence is independently -O-, -S- or -N(C_1-C_6 alkyl)-;

R_{270} at each occurrence is independently R_{205}, halogen C_1-C_6 alkoxy, C_1-C_6 haloalkoxy, $NR_{235}R_{240}$, -OH, -C≡N, -CO-(C_1-C_4 alkyl), -SO_2-$NR_{235}R_{240}$, -CO-$NR_{235}R_{240}$, -SO_2-(C_1-C_4 alkyl), =O, or C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl or -$(CH_2)_{0-4}$-C_3-C_7 cycloalkyl, each of which is optionally substituted with 1, 2, or 3 R_{205} groups;

R_N is R'_{100}, -C(=O)-NR_{100}-R'_{100}, -C(=O)O-R'_{100}, -$SO_2R'_{100}$, -$(CRR')_{1-6}R'_{100}$, -C(=O)-$(CRR')_{0-6}R_{100}$, -C(=O)-$(CRR')_{1-6}$-O-R'_{100}, -C(=O)-$(CRR')_{1-6}$-S-R'_{100}, -C(=O)-$(CRR')_{1-6}$-C(=O)-R_{100}, -C(=O)-$(CRR')_{1-6}$-SO_2-R_{100}, -C(=O)-$(CRR')_{1-6}$-NR_{100}-R'_{100}, or



wherein

R_4 is selected from the group consisting of H; NH_2; -NH-$(CH_2)_{n6}$-R_{4-1}; -NHR_8; -NR_{50}C(O)R_5; C_1-C_4 alkyl-NHC(O)R_5; -$(CH_2)_{0-4}R_8$; -O-C_1-C_4 alkanoyl; OH; C_6-C_{10} aryloxy optionally substituted with 1, 2, or 3 groups that are independently halogen, C_1-C_4 alkyl, -CO_2H, -C(O)-C_1-C_4 alkoxy, or C_1-C_4 alkoxy; C_1-C_6 alkoxy; aryl C_1-C_4 alkoxy; -$NR_{50}CO_2R_{51}$; -C_1-C_4 alkyl-$NR_{50}CO_2R_{51}$; -C≡N; -CF_3; -CF_2-CF_3; -C≡CH; -CH_2-CH=CH_2; -$(CH_2)_{1-4}$-R_{4-1}; -$(CH_2)_{1-4}$-NH-R_{4-1}; -O-$(CH_2)_{n6}$-R_{4-1}; -S-$(CH_2)_{n6}$-R_{4-1}; -$(CH_2)_{0-4}$-NHC(O)-$(CH_2)_{0-6}$-R_{52}; -$(CH_2)_{0-4}$-R_{53}-$(CH_2)_{0-4}$-R_{54};

wherein

n_6 is 0, 1, 2, or 3;

n_7 is 0, 1, 2, or 3;

R_{4-1} is selected from the group consisting of -SO_2-(C_1-C_8 alkyl), -SO-(C_1-C_8 alkyl), -S-(C_1-C_8 alkyl), -S-CO-(C_1-C_6 alkyl), -SO_2-$NR_{4-2}R_{4-3}$; -CO-C_1-C_2 alkyl; -CO-$NR_{4-3}R_{4-4}$;

R_{4-2} and R_{4-3} are independently H, C_1-C_3 alkyl, or C_3-C_6 cycloalkyl;

R_{4-4} is alkyl, arylalkyl, alkanoyl, or arylalkanoyl;

R_{4-6} is-H or C_1-C_6 alkyl;

R_5 is selected from the group consisting of C_3-C_7 cycloalkyl; C_1-C_6 alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen, $-NR_6R_7$, C_1-C_4 alkoxy, C_5-C_6 heterocycloalkyl, C_5-C_6 heteroaryl, C_6-C_{10} aryl, C_3-C_7 cycloalkyl C_1-C_4 alkyl, $-S$-C_1-C_4 alkyl, $-SO_2$-C_1-C_4 alkyl, $-CO_2H$, $-CONR_6R_7$, $-CO_2$-C_1-C_4 alkyl, C_6-C_{10} aryloxy; heteroaryl optionally substituted with 1, 2, or 3 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, C_1-C_4 haloalkyl, or OH; heterocycloalkyl optionally substituted with 1, 2, or 3 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, or C_2-C_4 alkanoyl; aryl optionally substituted with 1, 2, 3, or 4 groups that are independently halogen, OH, C_1-C_4 alkyl, C_1-C_4 alkoxy, or C_1-C_4 haloalkyl; and $-NR_6R_7$; wherein

R_6 and R_7 are independently selected from the group consisting of H, C_1-C_6 alkyl, C_2-C_6 alkanoyl, phenyl, $-SO_2$-C_1-C_4 alkyl, phenyl C_1-C_4 alkyl;

R_8 is selected from the group consisting of $-SO_2$-heteroaryl, $-SO_2$-aryl, $-SO_2$-heterocycloalkyl, $-SO_2$-C_1-C_{10} alkyl, $-C(O)NHR_9$, heterocycloalkyl, $-S$-C_1-C_6 alkyl, $-S$-C_2-C_4 alkanoyl, wherein

R_9 is aryl C_1-C_4 alkyl, C_1-C_6 alkyl, or H;

R_{50} is H or C_1-C_6 alkyl;

R_{51} is selected from the group consisting of aryl C_1-C_4 alkyl; C_1-C_6 alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen, cyano, heteroaryl, $-NR_6R_7$, $-C(O)NR_6R_7$, C_3-C_7 cycloalkyl, or $-C_1$-C_4 alkoxy; heterocycloalkyl optionally substituted with

1 or 2 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, C_2-C_4 alkanoyl, aryl C_1-C_4 alkyl, and -SO_2 C_1-C_4 alkyl; alkenyl; alkynyl; heteroaryl optionally substituted with 1, 2, or 3 groups that are independently OH, C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, NH_2, NH(C_1-C_6 alkyl) or N(C_1-C_6 alkyl)(C_1-C_6 alkyl); heteroarylalkyl optionally substituted with 1, 2, or 3 groups that are independently C_1-C_4 alkyl, C_1-C_4 alkoxy, halogen, NH_2, NH(C_1-C_6 alkyl) or N(C_1-C_6 alkyl)(C_1-C_6 alkyl); aryl; heterocycloalkyl; C_3-C_8 cycloalkyl; and cycloalkylalkyl; wherein the aryl; heterocycloalkyl, C_3-C_8 cycloalkyl, and cycloalkylalkyl groups are optionally substituted with 1, 2, 3, 4 or 5 groups that are independently halogen, CN, NO_2, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_2-C_6 alkanoyl, C_1-C_6 haloalkyl, C_1-C_6 haloalkoxy, hydroxy, C_1-C_6 hydroxyalkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, C_1-C_6 thioalkoxy, C_1-C_6 thioalkoxy C_1-C_6 alkyl, or C_1-C_6 alkoxy C_1-C_6 alkoxy;

R_{52} is heterocycloalkyl, heteroaryl, aryl, cycloalkyl, -$S(O)_{0-2}$-C_1-C_6 alkyl, CO_2H, -$C(O)NH_2$, -C(O)NH(alkyl), -C(O)N(alkyl)(alkyl), -CO_2-alkyl, -$NHS(O)_{0-2}$-C_1-C_6 alkyl, -N(alkyl)$S(O)_{0-2}$-C_1-C_6 alkyl, -$S(O)_{0-2}$-heteroaryl, -$S(O)_{0-2}$-aryl, -NH(arylalkyl), -N(alkyl)(arylalkyl), thioalkoxy, or alkoxy, each of which is optionally substituted with 1, 2, 3, 4, or 5 groups that are independently alkyl, alkoxy, thioalkoxy, halogen, haloalkyl, haloalkoxy, alkanoyl, NO_2, CN, alkoxycarbonyl, or aminocarbonyl;

R_{53} is absent, -O-, -C(O)-, -NH-, -N(alkyl)-, -NH-$S(O)_{0-2}$-, -N(alkyl)-$S(O)_{0-2}$-, -$S(O)_{0-2}$-NH-, -$S(O)_{0-2}$- N(alkyl)-, -NH-C(S)-, or -N(alkyl)-C(S)-;

R_{54} is heteroaryl, aryl, arylalkyl, heterocycloalkyl, CO_2H, -CO_2-alkyl, -C(O)NH(alkyl), -C(O)N(alkyl) (alkyl),

$-C(O)NH_2$, C_1-C_8 alkyl, OH, aryloxy, alkoxy, arylalkoxy, NH_2, NH(alkyl), N(alkyl) (alkyl), or $-C_1$-C_6 alkyl-CO_2-C_1-C_6 alkyl, each of which is optionally substituted with 1, 2, 3, 4, or 5 groups that are independently alkyl, alkoxy, CO_2H, $-CO_2$-alkyl, thioalkoxy, halogen, haloalkyl, haloalkoxy, hydroxyalkyl, alkanoyl, NO_2, CN, alkoxycarbonyl, or aminocarbonyl;

X' is selected from the group consisting of $-C_1$-C_6 alkylidenyl optionally optionally substituted with 1, 2, or 3 methyl groups; and $-NR_{4-6}-$; or

R_4 and R_{4-6} combine to form $-(CH_2)_{n10}-$, wherein

n_{10} is 1, 2, 3, or 4;

Z is selected from the group consisting of a bond; SO_2; SO; S; and C(O);

Y is selected from the group consisting of H; C_1-C_4 haloalkyl; C_5-C_6 heterocycloalkyl; C_6-C_{10} aryl; OH; $-N(Y_1)(Y_2)$; C_1-C_{10} alkyl optionally substituted with 1 thru 3 substituents which can be the same or different and are selected from the group consisting of halogen, hydroxy, alkoxy, thioalkoxy, and haloalkoxy; C_3-C_8 cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from C_1-C_3 alkyl, and halogen; alkoxy; aryl optionally substituted with halogen, alkyl, alkoxy, CN or NO_2; arylalkyl optionally substituted with halogen, alkyl, alkoxy, CN or NO_2; wherein

Y_1 and Y_2 are the same or different and are H; C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 substituents selected from the group consisting of halogen, C_1-C_4 alkoxy, C_3-C_8 cycloalkyl, and OH; C_2-C_6 alkenyl; C_2-C_6 alkanoyl; phenyl; $-SO_2$-C_1-C_4 alkyl; phenyl C_1-C_4 alkyl; or C_3-C_8 cycloalkyl C_1-C_4 alkyl; or

Y_1, Y_2 and the nitrogen to which they are attached form a ring selected from the group consisting of piperazinyl, piperidinyl, morpholinyl, and pyrolidinyl, wherein each

ring is optionally substituted with 1, 2, 3, or 4 groups that are independently C_1-C_6 alkyl, C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkyl, or halogen;

R_{100} and R'_{100} independently represent aryl, heteroaryl, -aryl-W-aryl, -aryl-W-heteroaryl, -aryl-W-heterocyclyl, -heteroaryl-W-aryl, -heteroaryl-W-heteroaryl, -heteroaryl-W-heterocyclyl, -heterocyclyl-W-aryl, -heterocyclyl-W-heteroaryl, -heterocyclyl-W-heterocyclyl, $-CH[(CH_2)_{0-2}-O-R_{150}]-(CH_2)_{0-2}$-aryl, $-CH[(CH_2)_{0-2}-O-R_{150}]-(CH_2)_{0-2}$-heterocyclyl or $-CH[(CH_2)_{0-2}-O-R_{150}]-(CH_2)_{0-2}$-heteroaryl, where the ring portions of each are optionally substituted with 1, 2, or 3 groups independently selected from

-OR, $-NO_2$, halogen, $-C\equiv N$, $-OCF_3$, $-CF_3$, $-(CH_2)_{0-4}-O-P(=O)(OR)(OR')$, $-(CH_2)_{0-4}-CO-NR_{105}R'_{105}$, $-(CH_2)_{0-4}-O-(CH_2)_{0-4}-CONR_{102}R_{102}'$, $-(CH_2)_{0-4}-CO-(C_1-C_{12}$ alkyl), $-(CH_2)_{0-4}-CO-(C_2-C_{12}$ alkenyl), $-(CH_2)_{0-4}-CO-(C_2-C_{12}$ alkynyl), $-(CH_2)_{0-4}-CO-(CH_2)_{0-4}(C_3-C_7$ cycloalkyl), $-(CH_2)_{0-4}-R_{110}$, $-(CH_2)_{0-4}-R_{120}$, $-(CH_2)_{0-4}-R_{130}$, $-(CH_2)_{0-4}-CO-R_{110}$, $-(CH_2)_{0-4}-CO-R_{120}$, $-(CH_2)_{0-4}-CO-R_{130}$, $-(CH_2)_{0-4}-CO-R_{140}$, $-(CH_2)_{0-4}-CO-O-R_{150}$, $-(CH_2)_{0-4}-SO_2-NR_{105}R'_{105}$, $-(CH_2)_{0-4}-SO-(C_1-C_8$ alkyl), $-(CH_2)_{0-4}-SO_2-(C_1-C_{12}$ alkyl), $-(CH_2)_{0-4}-SO_2-(CH_2)_{0-4}-(C_3-C_7$ cycloalkyl), $-(CH_2)_{0-4}-N(R_{150})-CO-O-R_{150}$, $-(CH_2)_{0-4}-N(R_{150})-CO-N(R_{150})_2$, $-(CH_2)_{0-4}-N(R_{150})-CS-N(R_{150})_2$, $-(CH_2)_{0-4}-N(R_{150})-CO-R_{105}$, $-(CH_2)_{0-4}-NR_{105}R'_{105}$, $-(CH_2)_{0-4}-R_{140}$, $-(CH_2)_{0-4}-O-CO-(C_1-C_6$ alkyl), $-(CH_2)_{0-4}-O-P(O)-(O-R_{110})_2$, $-(CH_2)_{0-4}-O-CO-N(R_{150})_2$, $-(CH_2)_{0-4}-O-CS-N(R_{150})_2$, $-(CH_2)_{0-4}-O-(R_{150})$, $-(CH_2)_{0-4}-O-R_{150}'-COOH$, $-(CH_2)_{0-4}-S-(R_{150})$, $-(CH_2)_{0-4}-N(R_{150})-SO_2-R_{105}$, $-(CH_2)_{0-4}-$ C_3-C_7 cycloalkyl, (C_2-C_{10})alkenyl, or (C_2-C_{10})alkynyl, or

R_{100} is C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 R_{115} groups, or

R_{100} is $-(C_1-C_6$ alkyl$)-O-C_1-C_6$ alkyl) or $-(C_1-C_6$ alkyl$)-S-(C_1-C_6$ alkyl), each of which is optionally substituted with 1, 2, or 3 R_{115} groups, or

R_{100} is C_3-C_8 cycloalkyl optionally substituted with 1, 2, or 3 R_{115} groups;

W is $-(CH_2)_{0-4}-$, $-O-$, $-S(O)_{0-2}-$, $-N(R_{135})-$, $-CR(OH)-$ or $-C(O)-$;

R_{102} and R_{102}' independently are hydrogen, or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups that are independently halogen, aryl or $-R_{110}$;

R_{105} and R'_{105} independently represent $-H$, $-R_{110}$, $-R_{120}$, C_3-C_7 cycloalkyl, $-(C_1-C_2$ alkyl$)-(C_3-C_7$ cycloalkyl), $-(C_1-C_6$ alkyl$)-O-(C_1-C_3$ alkyl), C_2-C_6 alkenyl, C_2-C_6 alkynyl, or C_1-C_6 alkyl chain with one double bond and one triple bond, or

C_1-C_6 alkyl optionally substituted with $-OH$ or $-NH_2$; or,

C_1-C_6 alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, or

R_{105} and R'_{105} together with the atom to which they are attached form a 3 to 7 membered carbocylic ring, where one member is optionally a heteratom selected from $-O-$, $-S(O)_{0-2}-$, $-N(R_{135})-$, the ring being optionally substituted with 1, 2 or three R_{140} groups;

R_{115} at each occurrence is independently halogen, $-OH$, $-CO_2R_{102}$, $-C_1-C_6$ thioalkoxy, $-CO_2-$phenyl, $-NR_{105}R'_{135}$, $-SO_2-(C_1-C_8$ alkyl), $-C(=O)R_{180}$, R_{180}, $-CONR_{105}R'_{105}$, $-SO_2NR_{105}R'_{105}$, $-NH-CO-(C_1-C_6$ alkyl), $-NH-C(=O)-OH$, $-NH-C(=O)-OR$, $-NH-C(=O)-O-$phenyl, $-O-C(=O)-(C_1-C_6$ alkyl), $-O-C(=O)-$amino, $-O-C(=O)-$mono- or dialkylamino, $-O-C(=O)-$phenyl, $-O-(C_1-C_6$ alkyl$)-CO_2H$, $-NH-SO_2-(C_1-C_6$ alkyl), C_1-C_6 alkoxy or C_1-C_6 haloalkoxy;

R_{135} is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_3-C_7 cycloalkyl, $-(CH_2)_{0-2}-$(aryl), $-(CH_2)_{0-2}-$(heteroaryl), or $-(CH_2)_{0-2}-$(heterocyclyl);

R_{140} is heterocyclyl optionally substituted with 1, 2, 3, or 4 groups independently selected from C_1-C_6 alkyl, C_1-C_6 alkoxy,

halogen, hydroxy, cyano, nitro, amino, mono(C_1-C_6)alkylamino, di(C_1-C_6)alkylamino, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 haloalkoxy, amino(C_1-C_6)alkyl, mono(C_1-C_6)alkylamino(C_1-C_6)alkyl, di(C_1-C_6)alkylamino(C_1-C_6)alkyl, and =O;

R_{150} is hydrogen, C_3-C_7 cycloalkyl, -(C_1-C_2 alkyl)-(C_3-C_7 cycloalkyl), C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 alkyl with one double bond and one triple bond, -R_{110}, -R_{120}, or

C_1-C_6 alkyl optionally substituted with 1, 2, 3, or 4 groups independently selected from -OH, -NH_2, C_1-C_3 alkoxy, R_{110}, and halogen;

R_{150}' is C_3-C_7 cycloalkyl, -(C_1-C_3 alkyl)-(C_3-C_7 cycloalkyl), C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 alkyl with one double bond and one triple bond, -R_{110}, -R_{120}, or

C_1-C_6 alkyl optionally substituted with 1, 2, 3, or 4 groups independently selected from -OH, -NH_2, C_1-C_3 alkoxy, R_{110}, and halogen;

R_{180} is selected from morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl, homomorpholinyl, homothiomorpholinyl, homothiomorpholinyl S-oxide, homothiomorpholinyl S,S-dioxide, pyrrolinyl and pyrrolidinyl, each of which is optionally substituted with 1, 2, 3, or 4 groups independently selected from C_1-C_6 alkyl, C_1-C_6 alkoxy, halogen, hydroxy, cyano, nitro, amino, mono(C_1-C_6)alkylamino, di(C_1-C_6)alkylamino, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_1-C_6 haloalkyl, C_1-C_6 haloalkoxy, amino(C_1-C_6)alkyl, mono(C_1-C_6)alkylamino(C_1-C_6)alkyl, di(C_1-C_6)alkylamino(C_1-C_6)alkyl, and =O;

R_{110} is aryl optionally substituted with 1 or 2 R_{125} groups;

R_{125} at each occurrence is independently halogen, amino, mono- or dialkylamino, -OH, -C≡N, -SO_2-NH_2, -SO_2-NH-C_1-C_6 alkyl, -SO_2-N(C_1-C_6 alkyl)$_2$, -SO_2-(C_1-C_4 alkyl), -CO-NH_2, -CO-NH-C_1-C_6 alkyl, or -CO-N(C_1-C_6 alkyl)$_2$, or

C_1-C_6 alkyl, C_2-C_6 alkenyl or C_2-C_6 alkynyl, each of which is optionally substituted with 1, 2, or 3 groups that are independently selected from C_1-C_3 alkyl, halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, amino, and mono- and dialkylamino, or

C_1-C_6 alkoxy optionally substituted with one, two or three of halogen;

R_{120} is heteroaryl, which is optionally substituted with 1 or 2 R_{125} groups; and

R_{130} is heterocyclyl optionally substituted with 1 or 2 R_{125} groups; and

R_2 is selected from the group consisting of H; C_1-C_6 alkyl, optionally substituted with 1, 2, or 3 substituents that are independently selected from the group consisting of C_1-C_3 alkyl, halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, and $-NR_{1-a}R_{1-b}$; wherein

R_{1-a} and R_{1-b} are -H or C_1-C_6 alkyl;
$-(CH_2)_{0-4}$-aryl; $-(CH_2)_{0-4}$-heteroaryl; C_2-C_6 alkenyl; C_2-C_6 alkynyl; $-CONR_{N-2}R_{N-3}$; $-SO_2NR_{N-2}R_{N-3}$; $-CO_2H$; and $-CO_2-(C_1$-C_4 alkyl);

R_3 is selected from the group consisting of H; C_1-C_6 alkyl, optionally substituted with 1, 2, or 3 substituents independently selected from the group consisting of C_1-C_3 alkyl, halogen, -OH, -SH, -C≡N, $-CF_3$, C_1-C_3 alkoxy, and $-NR_{1-a}R_{1-b}$; $-(CH_2)_{0-4}$-aryl; $-(CH_2)_{0-4}$-heteroaryl; C_2-C_6 alkenyl; C_2-C_6 alkynyl; $-CO-NR_{n-2}R_{n-3}$; $-SO_2-NR_{n-2}R_{n-3}$; $-CO_2H$; and - CO-O-(C_1-C_4 alkyl);

wherein

R_{N-2} and R_{N-3} at each occurrence are independently selected from the group consisting of -C_1-C_8 alkyl optionally substituted with 1, 2, or 3 groups independently selected from the group consisting of -

OH, $-NH_2$, phenyl and halogen; $-C_3-C_8$ cycloalkyl; $-(C_1-C_2$ alkyl$)-(C_3-C_8$ cycloalkyl); $-(C_1-C_6$ alkyl$)-O-(C_1-C_3$ alkyl); $-C_2-C_6$ alkenyl; $-C_2-C_6$ alkynyl; $-C_1-C_6$ alkyl chain with one double bond and one triple bond; aryl; heteroaryl; heterocycloalkyl; or

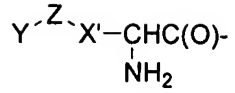
R_{N-2}, R_{N-3} and the nitrogen to which they are attached form a 5, 6, or 7 membered heterocycloalkyl or heteroaryl group, wherein said heterocycloalkyl or heteroaryl group is optionally fused to a benzene, pyridine, or pyrimidine ring, and said groups are unsubstituted or substituted with 1, 2, 3, 4, or 5 groups that at each occurrence are independently C_1-C_6 alkyl, C_1-C_6 alkoxy, halogen, halo C_1-C_6 alkyl, halo C_1-C_6 alkoxy, $-CN$, $-NO_2$, $-NH_2$, $NH(C_1-C_6$ alkyl), $N(C_1-C_6$ alkyl$)(C_1-C_6$ alkyl), $-OH$, $-C(O)NH_2$, $-C(O)NH(C_1-C_6$ alkyl), $-C(O)N(C_1-C_6$ alkyl$)(C_1-C_6$ alkyl), C_1-C_6 alkoxy C_1-C_6 alkyl, C_1-C_6 thioalkoxy, and C_1-C_6 thioalkoxy C_1-C_6 alkyl;

or wherein,

R_2, R_3 and the carbon to which they are attached form a carbocycle of three thru seven carbon atoms, wherein one carbon atom is optionally replaced by a group selected from-O-, -S-, -SO_2-, or $-NR_{N-2}$-.

Claim 2. (original) A compound according to claim 1 wherein RN is R_N is R'_{100}, $-C(=O)-NR_{100}-R'_{100}$, $-C(=O)O-R'_{100}$, $-SO_2R'_{100}$, $-(CRR')_{1-6}R'_{100}$, $-C(=O)-(CRR')_{0-6}R_{100}$, $-C(=O)-(CRR')_{1-6}-O-R'_{100}$, $-C(=O)-(CRR')_{1-6}-S-R'_{100}$, $-C(=O)-(CRR')_{1-6}-C(=O)-R_{100}$, $-C(=O)-(CRR')_{1-6}-SO_2-R_{100}$, or $-C(=O)-(CRR')_{1-6}-NR_{100}-R'_{100}$.

Claim 3. (original) A compound according to claim 1, wherein R_N is



wherein

X′ is C_1-C_4 alkylidenyl optionally substituted with 1, 2, or 3 methyl groups; or $-NR_{4-6}-$, where R_{4-6} is –H or C_1-C_6 alkyl; or

R_4 and R_{4-6} combine to form $-(CH_2)_{n10}-$, wherein

n_{10} is 1, 2, 3, or 4;

Z is selected from a bond; SO_2; SO; S; and C(O);

Y is selected from H; C_1-C_4 haloalkyl; C_5-C_6 heterocycloalkyl containing at least one N, O, or S; phenyl; OH; $-N(Y_1)(Y_2)$; C_1-C_{10} alkyl optionally substituted with 1 thru 3 substituents which can be the same or different and are selected from halogen, hydroxy, alkoxy, thioalkoxy, and haloalkoxy; C_3-C_8 cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from C_1-C_3 alkyl, and halogen; alkoxy; phenyl optionally substituted with halogen, C_1-C_4 alkyl, C_1-C_4 alkoxy, CN or NO_2; phenyl C_1-C_4 alkyl optionally substituted with halogen, C_1-C_4 alkyl, C_1-C_4 alkoxy, CN or NO_2; wherein

Y_1 and Y_2 are the same or different and are H; C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 substituents selected from the group consisting of halogen, C_1-C_4 alkoxy, C_3-C_8 cycloalkyl, and OH; C_2-C_6 alkenyl; C_2-C_6 alkanoyl; phenyl; $-SO_2$-C_1-C_4 alkyl; phenyl C_1-C_4 alkyl; and C_3-C_8 cycloalkyl C_1-C_4 alkyl; or $-N(Y_1)(Y_2)$ forms a ring selected from piperazinyl, piperidinyl, morpholinyl, and pyrolidinyl, wherein each ring is optionally substituted with 1, 2, 3, or 4 groups that are independently C_1-C_6 alkyl, C_1-C_6 alkoxy, C_1-C_6 alkoxy C_1-C_6 alkyl, or halogen.

Claim 4. (original) A compound according to claim 1, wherein R_1 is aryl, heteroaryl, heterocyclyl, -C_1-C_6 alkyl-aryl, -

C_1-C_6 alkyl-heteroaryl, or -C_1-C_6 alkyl-heterocyclyl, where the ring portions of each are optionally substituted with 1, 2, 3, or 4 groups independently selected from halogen, -OH, -SH, -C≡N, -NO_2, -$NR_{105}R'_{105}$, -CO_2R, -N(R)COR', or -N(R)SO_2R' (where R_{105}, R'_{105}, R and R' are as defined above), -C(=O)-(C_1-C_4) alkyl, -SO_2-amino, -SO_2-mono or dialkylamino, -C(=O)-amino, -C(=O)-mono or dialkylamino, -SO_2-(C_1-C_4) alkyl, or

C_1-C_6 alkoxy optionally substituted with 1, 2, or 3 groups which are independently selected from halogen, or

C_3-C_7 cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF_3, C_1-C_3 alkoxy, amino, -C_1-C_6 alkyl and mono- or dialkylamino, or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF_3, -C_1-C_3 alkoxy, amino, mono- or dialkylamino and -C_1-C_3 alkyl, or

C_2-C_{10} alkenyl or C_2-C_{10} alkynyl each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF_3, C_1-C_3 alkoxy, amino, C_1-C_6 alkyl and mono- or dialkylamino; and the heterocyclyl group is optionally further substituted with oxo.

Claim 5. (original) A compound according to claim 4, wherein R_1 is

-C_1-C_6 alkyl-aryl, -C_1-C_6 alkyl-heteroaryl, or -C_1-C_6 alkyl-heterocyclyl, where the ring portions of each are optionally substituted with 1, 2, 3, or 4 groups independently selected from halogen, -OH, -SH, -C≡N, -NO_2, -$NR_{105}R'_{105}$, -CO_2R, -N(R)COR', or -N(R)SO_2R' (where R_{105}, R'_{105}, R and R' are as defined above),

-C(=O)-(C_1-C_4) alkyl, -SO_2-amino, -SO_2-mono or dialkylamino, -C(=O)-amino, -C(=O)-mono or dialkylamino, -SO_2-(C_1-C_4) alkyl, or

C_1-C_6 alkoxy optionally substituted with 1, 2, or 3 groups which are independently selected from halogen, or

C_3-C_7 cycloalkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF_3, C_1-C_3 alkoxy, amino, -C_1-C_6 alkyl and mono- or dialkylamino, or

C_1-C_{10} alkyl optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF_3, -C_1-C_3 alkoxy, amino, mono- or dialkylamino and -C_1-C_3 alkyl, or

C_2-C_{10} alkenyl or C_2-C_{10} alkynyl each of which is optionally substituted with 1, 2, or 3 groups independently selected from halogen, -OH, -SH, -C≡N, -CF_3, C_1-C_3 alkoxy, amino, C_1-C_6 alkyl and mono- or dialkylamino; and the heterocyclyl group is optionally further substituted with oxo.

Claim 6. (original) A compound according to claim 1 wherein:

R_N is -C(=O)-R_{100}; and

R_{100} represents aryl, or heteroaryl, where the ring portions of each are optionally substituted with 1, 2, or 3 groups independently selected from

-OR, -NO_2, C_1-C_6 alkyl, halogen, -C≡N, -OCF_3, -CF_3, -$(CH_2)_{0-4}$-O-P(=O)(OR)(OR'), -$(CH_2)_{0-4}$-CO-$NR_{105}R'_{105}$, -$(CH_2)_{0-4}$-O-$(CH_2)_{0-4}$-$CONR_{102}R_{102}$', -$(CH_2)_{0-4}$-CO-(C_1-C_{12} alkyl), -$(CH_2)_{0-4}$-CO-(C_2-C_{12} alkenyl), -$(CH_2)_{0-4}$-CO-(C_2-C_{12} alkynyl), -$(CH_2)_{0-4}$-CO-$(CH_2)_{0-4}$(C_3-C_7 cycloalkyl), -$(CH_2)_{0-4}$-R_{110}, -$(CH_2)_{0-4}$-R_{120}, -$(CH_2)_{0-4}$-R_{130}, -$(CH_2)_{0-4}$-CO-R_{110}, -$(CH_2)_{0-4}$-CO-R_{120}, -$(CH_2)_{0-4}$-CO-R_{130}, -$(CH_2)_{0-4}$-CO-R_{140}, -$(CH_2)_{0-4}$-CO-O-R_{150}, -$(CH_2)_{0-4}$-SO_2-$NR_{105}R'_{105}$, -$(CH_2)_{0-4}$-SO-(C_1-C_8 alkyl), -$(CH_2)_{0-4}$-SO_2-(C_1-C_{12} alkyl), -$(CH_2)_{0-4}$-SO_2-$(CH_2)_{0-4}$-(C_3-C_7 cycloalkyl), -$(CH_2)_{0-4}$-N(R_{150})-CO-O-R_{150}, -$(CH_2)_{0-4}$-N(R_{150})-

$CO-N(R_{150})_2$, $-(CH_2)_{0-4}-N(R_{150})-CS-N(R_{150})_2$, $-(CH_2)_{0-4}-N(R_{150})-CO-R_{105}$, $-(CH_2)_{0-4}-NR_{105}R'_{105}$, $-(CH_2)_{0-4}-R_{140}$, $-(CH_2)_{0-4}-O-CO-(C_1-C_6$ alkyl), $-(CH_2)_{0-4}-O-P(O)-(O-R_{110})_2$, $-(CH_2)_{0-4}-O-CO-N(R_{150})_2$, $-(CH_2)_{0-4}-O-CS-N(R_{150})_2$, $-(CH_2)_{0-4}-O-(R_{150})$, $-(CH_2)_{0-4}-O-R_{150}'-COOH$, $-(CH_2)_{0-4}-S-(R_{150})$, $-(CH_2)_{0-4}-N(R_{150})-SO_2-R_{105}$, $-(CH_2)_{0-4}-$ C_3-C_7 cycloalkyl, (C_2-C_{10})alkenyl, or (C_2-C_{10})alkynyl.

Claim 7. (original) A compound according to claim 1 wherein:

R_C is hydrogen, $-(CR_{245}R_{250})_{0-4}$-aryl, $-(CR_{245}R_{250})_{0-4}$-heteroaryl, $-(CR_{245}R_{250})_{0-4}$-heterocyclyl,

C_2-C_{10} alkyl optionally substituted with 1, 2, or 3 groups independently selected from the group consisting of R_{205}, R_{110}, R_{120}, R_{130}, $-OC=ONR_{235}R_{240}$, $-S(=O)_{0-2}(C_1-C_6$ alkyl), -SH, and $-S(=O)_2NR_{235}R_{240}$,

$-(CH_2)_{0-3}-(C_3-C_8)$ cycloalkyl wherein the cycloalkyl is optionally substituted with 1, 2, or 3 groups independently selected from the group consisting of R_{205}, $-CO_2H$, and $-CO_2-(C_1-C_4$ alkyl), or

C_2-C_{10} alkenyl or C_2-C_{10} alkynyl, each of which is optionally substituted with 1, 2, or 3 independently selected R_{205} groups, wherein

each aryl and heteroaryl is optionally substituted with 1, 2, or 3 R_{200}, and wherein each heterocyclyl is optionally substituted with 1, 2, 3, or 4 independently selected R_{210} groups.

Claim 8. (original) A compound according to claim 1 wherein R_2, R_3, and R_{20} are each hydrogen.

Claim 9. (currently amended) A compound according to claim 1 selected from the group consisting of:

N-(3,5-difluorobenzyl)-N-{(2R)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}-5-methyl-N',N'-dipropylisophthalamide;

N-[2-(3,5-difluorophenyl)ethyl]-N-{(2R)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}-5-methyl-N',N'-dipropylisophthalamide;

3-[([2-(3,5-difluorophenyl)ethyl]{(2R)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}amino)sulfonyl]-N,N-dipropylbenzamide;

N-(3,5-difluorobenzyl)-*N*-((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)-5-methyl-*N*',*N*'-dipropylisophthalamide;

N-[2-(3,5-difluorophenyl)ethyl]-*N*-((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)-5-methyl-*N*',*N*'-dipropylisophthalamide;

3-{[[2-(3,5-difluorophenyl)ethyl]((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)amino]sulfonyl}-*N*,*N*-dipropylbenzamide;

N-(3,5-difluorobenzyl)-*N*-{(2*R*)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}-*N*',*N*',5-trimethylisophthalamide;

N-[2-(3,5-difluorophenyl)ethyl]-*N*-{(2*R*)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}-*N*',*N*',5-trimethylisophthalamide;

3-[([2-(3,5-difluorophenyl)ethyl]{(2*R*)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}amino)sulfonyl]-*N*,*N*-dimethylbenzamide;

N-(3,5-difluorobenzyl)-*N*-((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)-*N*',*N*',5-trimethylisophthalamide;

N-[2-(3,5-difluorophenyl)ethyl]-*N*-((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)-*N'*,*N'*,5-trimethylisophthalamide;

3-{[[2-(3,5-difluorophenyl)ethyl]((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)amino]sulfonyl}-*N*,*N*-dimethylbenzamide;

N-(3-chloro-5-fluorobenzyl)-*N*-{(2*R*)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}-5-methyl-*N'*,*N'*-dipropylisophthalamide;

N-[2-(3-chloro-5-fluorophenyl)ethyl]-*N*-{(2*R*)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}-5-methyl-*N'*,*N'*-dipropylisophthalamide;

3-[([2-(3-chloro-5-fluorophenyl)ethyl]{(2*R*)-2-hydroxy-3-[(3-iodobenzyl)amino]propyl}amino)sulfonyl]-*N*,*N*-dipropylbenzamide;

N-(3-chloro-5-fluorobenzyl)-*N*-((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)-5-methyl-*N'*,*N'*-dipropylisophthalamide;

N-[2-(3-chloro-5-fluorophenyl)ethyl]-*N*-((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)-5-methyl-*N'*,*N'*-dipropylisophthalamide;

3-{[[2-(3-chloro-5-fluorophenyl)ethyl]((2*R*)-3-{[(4*R*)-6-ethyl-2,2-dioxido-3,4-dihydro-1*H*-isothiochromen-4-yl]amino}-2-hydroxypropyl)amino]sulfonyl}-*N*,*N*-dipropylbenzamide;

N-[(2*R*)-3-(benzylamino)-2-hydroxypropyl]-*N*-(3,5-difluorobenzyl)-5-methyl-*N'*,*N'*-dipropylisophthalamide;

N-[(2*R*)-3-(benzylamino)-2-hydroxypropyl]-*N*-[2-

(3,5-difluorophenyl)ethyl]-5-methyl-*N'*,*N'*-dipropylisophthalamide; ~~and~~

3-({[(2*R*)-3-(benzylamino)-2-hydroxypropyl][2-(3,5-difluorophenyl)ethyl]amino}sulfonyl)-*N*,*N*-dipropylbenzamide;

and salts therof.

Claim 10. (currently amended) A pharmaceutical composition comprising a compound according to claim 1 ~~any one of claims 1-9~~, in combination with a physiologically acceptable carrier or excipient.

Claims 11-12. (cancelled)

Claim 13. (original) A method for treating a patient who has, or in preventing a patient from getting, a disease or condition selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative dementias, including dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, or diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment, comprising administering to such patient a therapeutically effective amount of a compound of claim 1.

Claim 14. (original) A method for the treatment or prevention of Alzheimer's disease, mild cognitive impairment Down's syndrome, Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, cerebral amyloid angiopathy, other degenerative dementias, dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease comprising administration of a therapeutically effective amount of a compound or salt according to Claim 1, to a patient in need thereof.

Claim 15. (original) A method for making a compound of claim 1.